

REMARKS

Reconsideration of the instant application is respectfully requested. The present amendment is responsive to the Office Action of April 19, 2006, in which claims 1-7 and 9-20 are presently pending. Of those, claims 1-5, 10 and 11 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,225,011 to Gotoh, et al., in view of U.S. Patent 6,347,291 to Berman. Claims 6, 9, 12-16 and 18-20 are rejected under U.S.C. §103(a) as being unpatentable over Gotoh, in view of Berman, and further in view of U.S. Patent 6,801,825 to Utsonomyia.

In addition, claim 7 is rejected under U.S.C. §103(a) as being unpatentable over Gotoh, in view of Berman, and further in view of U.S. Patent 4,769,523 to Tanimoto, et al. Finally, claim 17 is rejected under U.S.C. §103(a) as being unpatentable over Gotoh, in view of Berman and Utsonomyia, and further in view of Tanimoto. The previously indicated allowability as to the subject matter of cancelled claim 8 has been withdrawn in view of the Berman reference. For the following reasons, it is respectfully submitted that the application is now in condition for allowance.

As an initial matter, paragraphs [0031] and [0034] have been amended as set forth above to correct typographical errors discovered therein.

However, as to each of the outstanding §103 rejections outlined above, the Applicant respectfully traverses the same. Upon further review of the teachings of the Gotoh reference, the Applicant respectfully submits that Gotoh does not in fact teach or disclose, as presently claimed:

“...defining a point of interest for each segment of the patterned substrate;
 locating a first point of interest in a first segment;
 scanning a first area proximate the first point of interest for a first unique
feature;

saving a scanned image of the first area;
defining a periodicity for the patterned substrate;
locating a second point of interest in a second segment based on the periodicity;
scanning a second area proximate the second point of interest for a second unique feature corresponding to the first unique feature, wherein the first unique feature is saved as an alignment image for use in locating the second unique feature in the second area...”

In particular, a review of the cited portions of the Gotoh reference (col. 2, lines 10-15, 20-25; Figures 5A, 5B) reveals that the teachings therein are directed toward correction of distortion of a pattern exposed by an optical exposure system, as opposed to automatic alignment of a wafer during semiconductor fabrication. More significantly, it will be seen that the “first point of interest” 8 from Figure 5A is actually a distortion measurement mark that is formed on a lithography mask 6, not a semiconductor wafer. In contrast, distortion measurement mark 8a is printed on the semiconductor wafer 1 in Figure 5B, using the mask of Figure 5A. Therefore, what is actually taught in Gotoh is a means of determining the degree of image distortion produced by an optical exposure system by comparing the position data of the actual printed distortion marks 8a on the wafer 1 with the fabricated distortion marks 8 on the mask 6.

Because a lithography mask is a totally separate object with respect to a semiconductor wafer, locating points of interest on two different objects does not meet (among other aspects) the claimed limitation of locating first and second points of interest on a patterned substrate. Therefore, because neither Gotoh nor any of the other reference of record teach each and every element of the pending claims, the claims are not rendered obvious by the same. It is therefore respectfully submitted that each of the outstanding §103 rejections have been overcome.

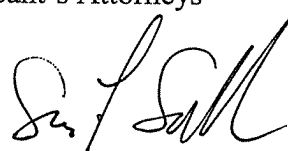
Furthermore, as to claims 7 and 17, the Applicant also respectfully submits that neither Gotoh nor Tanimoto teach raster scanning in the context actually claimed. That is, claims 7 and 17 recite that scanning a first area (proximate the first point of interest for a first unique feature) includes a raster movement *around the first point of interest until the first unique feature is within a field of view*. (Emphasis added) However, in Gotoh, the "scanning" refers to memorizing mark position data of the distortion measurement marks 8a formed on the wafer. (Col. 2, lines 24-25) In Tanimoto, raster scanning is described in the context of spot alignment of a chip using a laser (Col. 9, lines 60-65) Accordingly, since neither reference teaches or suggests raster scanning in the context actually claimed (i.e., moving around a first point of interest until a first unique feature is within a field of view), the rejections of claims 7 and 17 are also overcome on this additional basis.

For the above stated reasons, it is respectfully submitted that the present application is now in condition for allowance. No new matter has been entered and no additional fees are believed to be required. However, if any fees are due with respect to this Amendment, please charge them to Deposit Account No. 09-0458 maintained by Applicant's attorneys.

Respectfully submitted,
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